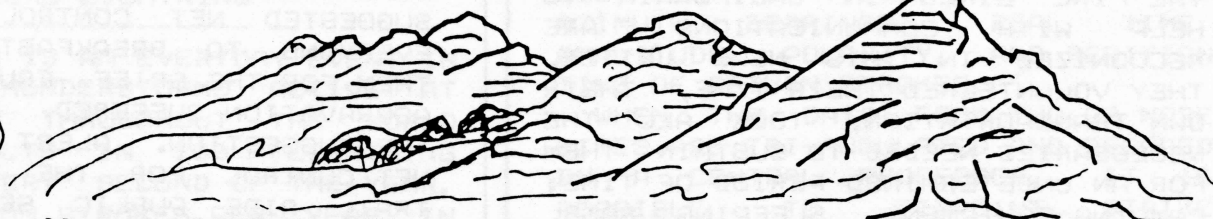


the CARRIER



W6CX

the MOUNT DIABLO AMATEUR RADIO CLUB

VOLUME XXXV - ISSUE 10, OCTOBER 1987

REPEATERS 147.06/223.74/441.325

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SCOTT MILES WB6PQM 934-6081
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JAY CALDIS KT6Y 939-1893
JIM HOUSE KA6IVF 372-0345

NETS: RACES, CLUB, ATV, HF

> RACES/ARES NETS <
NET EVERY THURSDAY AT 1900 HOURS
CENTRAL C.C. COUNTY 145.680/S
JAMES HOUSE, KA6IVF, E.C.
372-0345

EAST C.C. COUNTY 146.540/S
WM. VAN VOORHIS, WA6ZFZ, E.C.
754-1214

SOUTH C.C. COUNTY 147.555/S
CARSON TAYLOR, K6TI, E.C.
820-5297

WEST C.C. COUNTY 145.11/-R
JAMES CROOKE, KB6JEC, E.C.
529-1900

QSY TO 147.735/-R AT 1920 HOURS

> MT. DIABLO AMATEUR RADIO CLUB NET <
EVERY THURSDAY 1930 HRS 147.06/+
JAY CALDIS KT6Y NET CONTROL
> ATV NET FOLLOWS AT 2000 HOURS <

> CONTRA COSTA COUNTY EMERGENCY <
RADIO SERVICES NET

FIRST THURSDAY FOLLOWING THE FIRST
WEDNESDAY 2000 HOURS 3895 KHz
HANK BERRYMAN W6ZHY, AEC 934-9659

SHERIFF'S RESERVE UNIFORMED COMMUNICATIONS GROUP

* FOR ALL INFORMATION CONTACT:- *

VICKI	N6KLS)	COORDINATOR
GLENN(OM)	N6JRK)	458-4527
BRAD	WA6AEO	676-8239

NEXT MEMBERSHIP MEETING
FRIDAY OCTOBER 16

THE NEXT GENERAL MEMBERSHIP MEET-
ING WILL BE OUR ANNUAL AMATEUR
RADIO AUCTION HELD AT THE USUAL
MEETING PLACE, GRACE PRESBYTERIAN
CHURCH, 2100 TICE VALLEY BLVD.,
WALNUT CREEK. - 8 P.M. -

* ALL ARE WELCOME *

!! MARK YOUR CALENDAR NOW !!
FOR QUESTIONS OR DETAILS ABOUT
THE AUCTION, SEE FULL PAGE AD
ELSEWHERE IN THIS NEWSLETTER. (ED)

WHERE OUR CLUB MEMBERS LIVE

By Dr. George Jones, KI6YK

CITIES (EACH)	# OF MEMBERS
CONCORD & WALNUT CREEK	45
PLEASANT HILL & MARTINEZ	16
LAFAYETTE	15
DANVILLE	14
ANTIOCH, ORINDA, PITTSBURG	9
MORAGA & PLEASANTON	5
ALAMO, BENICIA, LIVERMORE, SAN RAMON, VALLEJO	3
S.F., BYRON, LIVERMORE, SAN RAMON, VALLEJO	2
SEAL BEACH, ALAMEDA, BRENTWOOD, CROCKETT, EL CERRITO, FREMONT, HAYWARD, SAN LEANDRO, SAN LORENZO, SUISUN, OAKLAND, EL SOBRANTE, PETALUMA, MILPITAS, WEIMAR, SACRAMENTO, NEVADA CITY	1
NEVADA, OREGON	1

AMATEUR RADIO OPS TO THE FIRE LINES

THE INDIVIDUALS WHO VOLUNTEERED FROM CONTRA COSTA COUNTY TO GO TO THE FIRE LINES IN CALIFORNIA TO HELP WITH COMMUNICATIONS ARE RECOGNIZED IN THIS NEWS LETTER. THEY VOLUNTEERED THEIR TIME, THEIR OWN TRANSPORTATION, TOOK ALL THE NECESSARIES NEEDED TO SUSTAIN THEM FOR AN UNDETERMINED PERIOD OF TIME; CAMPING EQUIPMENT, SLEEPING BAGS, SHAVING KITS, EMERGENCY FOOD AND WATER, MONEY UNTIL THEY ARE RE-IMBURSED, CHANGES OF CLOTHES, THEIR RADIO GEAR, ETC., TO GO TO NEW & UNKNOWN SITUATIONS AND CONDITIONS INVOLVING ONE OF OUR GREATEST NATURAL ENEMIES --- WILD FIRE ---.

WE DON'T HAVE TO BE IN PUBLIC SERVICE WORK LONG TO KNOW THAT ALL DOES NOT GO WELL WHEN WE VOLUNTEER OUR HELP IN PUBLIC SERVICE. IF A RECENT SUNDAY MORNING PUBLIC SERVICE EVENT, A FOOTRACE AT HEATHER FARMS IN WALNUT CREEK INVOLVING NINE OPERATORS CAN,

- WITHOUT FAULT OF ANYONE, - GO COMPLETELY BANANAS, WE KNEW BY THE MAGNITUDE AND EXTENT OF THE CALIFORNIA WILD FIRES, AND THE NUMEROUS NEEDS OF VARIOUS STATE AGENCIES THAT THE POSSIBILITIES OF ALL GOING WELL IS CLOSE TO ZERO !!! WE EXPECTED IT AND ARE ACCUSTOMED TO IT !

FOR BEING WILLING TO FACE POSSIBLE HARDSHIP CONDITIONS ALONG WITH THE KNOWN PROBABILITIES OF FRUSTRATION AGGRAVATION.....AND MAYBE COME BACK WITH SOME PLEASANT MEMORIES.....

* * *

* APPLAUSE-APPLAUSE-APPLAUSE *

* TO ALL WHO HELPED AT THE FIRES *

* * *

* KB6IXW ALAN BOND *

* N6LZM BILL BRIMMER *

* N6MWB VINCE CATALFANO *

* W7JKH JOHN DESSENBERGER *

* WW6K GENE FORNARIO *

* KA6CHJ PAUL HAMMER *

* N6VV LOU JENKINS *

* W6CPO LARRY KAYE *

* KD6DA TED LANE *

* KA6SQN JOHN OBAL *

* AA6DL RICHARD SCHULZ *

* KB6KZ ALFRED STONE *

* N6LGB SCOTT THOMAS *

* * *

INCIDENTAL ADDENDUM: ABOUT THE FOOT RACE AT HEATHER FARMS THAT WAS GOOFED-UP. NET CONTROL KT6X GAVE THE NINE OPS THE BAD NEWS, "NO FOOT RACE", ON THE AIR WHEN THEY WERE EN-ROUTE, BEFORE 7:30am. N6NVA SUGGESTED NET CONTROL KT6X TAKE EVERYONE TO BREAKFAST TO ASSUAGE THEM FOR THE GRIEF, FRUSTRATION AND AGGRAVATION SUFFERED. KT6X EVADED THE SUGGESTION. ALERT KA6IVF WAS NET CONTROL FOR THE LAS TRAMPAS TRAIL RIDE PUBLIC SERVICE EVENT GOING ON AT THE SAME TIME/FREQ. BEING SHORT OF OPERATORS AND HEARING OF ALL THOSE UNEMPLOYED OPS ON THE FOOT RACE, TRIED TO RECRUIT SOME OR ALL TO HIS EVENT..NO LUCK!! THE FOOT RACE OPERATORS HAD DECIDED TO CONVERT THE GOOF-UP TO A SOCIAL EVENT AT A COFFEE HOUSE.....

LIGHTNING PROTECTION

WINTER IS COMING AND WITH IT THE POSSIBILITY OF ELECTRIC STORMS AND LIGHTNING. THERE ARE VERY FEW IN THIS AREA, BUT ONE LIGHTNING STRIKE ON YOUR BASE STATION COULD SEVERELY DAMAGE EXPENSIVE RADIO EQUIPMENT.

THE BEST PROTECTION FROM LIGHTNING IS TO DISCONNECT ALL ANTENNAS FROM EQUIPMENT AND DISCONNECT THE EQUIPMENT FROM THE POWER LINES.*ELIMINATE THE POSSIBLE PATHS FOR LIGHTNING STRIKES.* ROTATOR CABLES AND OTHER CONTROL CABLES FROM THE ANTENNA LOCATION SHOULD ALSO BE DISCONNECTED DURING ELECTRICAL STORMS.

LIGHTNING PRODUCES BOTH ELECTRICAL AND MAGNETIC FIELDS THAT VARY WITH DISTANCE. THESE FIELDS CAN COUPLE INTO POWER LINES AND DESTROY ELECTRONIC COMPONENTS. RADIO EQUIPMENT CAN BE PROTECTED FROM THESE SURGES THROUGH THE USE OF TRANSIENT-PROTECTIVE DEVICES. -

AN EFFECTIVE GROUND SYSTEM IS A MUST FOR EVERY AMATEUR STATION. THE MISSION OF THE GROUND SYSTEM IS TWOFOLD. FIRST, IT REDUCES THE POSSIBILITY OF ELECTRICAL SHOCK IF SOMETHING IN A PIECE OF EQUIPMENT SHOULD FAIL AND THE CHASSIS OR CABINET BECOMES 'HOT'. SECOND, TO PROVIDE A LOW-IMPEDENCE PATH TO GROUND FOR ANY STRAY RF CURRENT INSIDE THER STATION. SEE THE LAST 'CARRIER' ABOUT "A BETTER GROUND", AND YOUR RADIO HANDBOOKS FOR MORE SUGGESTIONS.

~~~~~ MORE LIGHTNING ~~~~~

LIGHTNING IS AN EVERYDAY EVENT IN SOME 2000 THUNDERSTORMS ACTIVE AT ANY MOMENT THROUGHOUT THE WORLD WHICH RESULTS IN 100 LIGHTNING STROKES EVERY SECOND OF THE YEAR, OR 40 MILLION STROKES PER YEAR IN THE UNITED STATES ALONE. ACCURATE DETECTION OF LIGHTNING IS NECESSARY FOR MANY REASONS, INCLUDING FOREST FIRE DETECTION AND CONTROL (WE KNOW THAT !!), POWER GRID MONITORING, FLIGHT PLANNING AND PUBLIC SAFETY. NASA MONITORS LIGHTNING ACTIVITY AT VARIOUS MISSILE LAUNCH SITES.

FORTUNATELY, TECHNOLOGY NOW PROVIDES THE MEANS TO ACCOMPLISH THESE TASKS WITH A HIGH DEGREE OF ACCURACY.

NORTH AMERICA HAS MANY EXTENSIVE DETECTION SYSTEMS. NOW MEXICO, SOUTH AFRICA, JAPAN, AUSTRALIA, NORWAY, SWEDEN AND CHINA HAVE INSTALLED SIMILIAR SYSTEMS.

----- THEORY OF DETECTION -----

A LIGHTNING DISCHARGE TO GROUND CONTAINS SEVERAL LARGE CURRENT SURGES OR STROKES. A stepped leader PROCEEDS FROM THE CLOUD TO THE GROUND IN A SERIES OF SHORT STEPS. AFTER THIS LEADER REACHES THE GROUND, A LARGE RETURN STROKE TRAVELS RAPIDLY BACK UP THE IONIZED PATH LEFT BY THE LEADER. AFTER A PAUSE OF 30 TO 50 MILLISECONDS, A dart leader USUALLY FORMS; THIS IS FOLLOWED BY ONE OR MORE RETURN STROKES TRAVELING UPWARDS. TYPICALLY, A LIGHTNING STROKE CONTAINS THREE, FOUR, OR MORE RETURN STROKES.

UNTIL RECENTLY IT WAS THOUGHT THAT A NEGATIVE CHARGE WAS TRANSFERRED TO GROUND DURING A STRIKE, BUT IT IS NOW KNOWN THAT THE INCIDENCE OF POSITIVE CHARGES INCREASES AS LATITUDE INCREASES TOWARDS THE EARTH'S POLES.

THE CURRENT IN RETURN STROKES ATTAINS LEVELS OF UP TO 40 KILOAMPS IN 1 TO 10 MICROSECONDS. THE RISE TIME AND PULSE WIDTH OF THIS DISCHARGE FORM A DISTINCTIVE WAVE FORM OR SIGNATURE THAT CAN BE PROCESSED BY THE DETECTION

EQUIPMENT TO YIELD SUCH DATA AS AZIMUTH BEARINGS, REAL TIME, AMPLITUDE, POLARITY, AND REPITION TIME OF RETURN STROKES.

WHEN THE DATA FROM TWO OR MORE SITES ARE TRI-ANGULATED AND DECODED BY A CENTRAL PROCESSOR, IT IS POSSIBLE TO PINPOINT STRIKE LOCATIONS TO WITHIN 0.5 KM AT DISTANCES OF 500 KM. (HAM RADIO 9/87)

(EdNote) CDF ESTIMATES THERE WERE 12,000 LIGHTNING STROKES IN ONE WEEK IN THIS STATE WHICH CAUSED OUR RECENT AND PRESENT FIRE PROBLEMS.

----- --) TEN NEW SHADOWS (--- -----

TEN MORE AMATEUR RADIO OPERATORS IN CONTRA COSTA COUNTY HAVE COMPLETED A COURSE ON PERSONAL FIRE LINE SAFETY QUALIFYING THEM TO ACCOMPANY KEY FIRE LINE PERSONNEL TO WILD FIRE INDICENTS AS 'SHADOWS' FOR EMERGENCY COMMUNICATIONS.

THE 'SHADOW' PROGRAM STARTED IN THE CALIFORNIA DEPARTMENT OF FORESTRY IN 1985. AWARE OF WHAT THE AMATEUR RADIO OPERATOR HAD TO OFFER IN EMERGENCY COMMUNICATIONS, THIS TRAINING PROGRAM WAS STARTED WITHIN THE ALREADY ORGANIZED 'VOLUNTEERS IN FIRE PREVENTION'. ACTIVE MEMBERS ARE ASKED TO PARTICIPATE.

AFTER SUCCESSFUL COMPLETION OF THE 'INTRODUCTION TO FIRE BEHAVIOR' COURSE, TRAINEES COULD (1) IDENTIFY THE ENVIRONMENTAL FACTORS OF FIRE BEHAVIOR WHICH EFFECT THE START AND SPREAD OF WILDFIRE. (2) DISCUSS HOW BASIC FIRE SUPPRESSION METHODS METHODS APPLY TO BREAKING THE FIRE TRIANGLE AND (3) RECOGNIZE SITUATIONS WHICH ARE POTENTIALLY HAZARDOUS TO LIFE AND PROPERTY.

(THE COURSE INCLUDED PRACTICE WITH A MEANS OF PROTECTING YOURSELF IF ENVELOPED BY FIRE ON THE FIRE LINE) THE TEN NEW 'SHADOWS' BRING THE TOTAL TO 32 WITH MORE 'SHADOW' TRAINING ANTICIPATED.

THE COURSE WAS CONDUCTED BY:

DEPARTMENT OF FORESTRY

SANTA CLARA RANGER UNIT

DICK MAULDIN, BATTALION CHIEF

FIRE PREVENTION OFFICER

GLEN BASS, FIRE PREVENTION ASST.

ROB COLLIER, VOLUNTEER IN PREVENTION

MENDENHALL FIRE

GLENN BASS, FIRE PREVENTION ASST., CALIFORNIA DIVISION OF FORESTRY, REPORTS 23 AMATEUR RADIO PERSONNEL CONTRIBUTED A TOTAL OF 1279 HOURS TO THE MENDENHALL (MENDOCINO CO.) INCIDENT BETWEEN 9-4 AND 9-11/87. TOTAL HOURS FROM THE STANISLAUS COMPLEX WERE NOT YET AVAILABLE.

CONTRA COSTA COUNTY SIMULATED EMERGENCY TEST FRIDAY SEPTEMBER 25

By Larry Kaye, W6CPO
Contra Costa County DEC

"At approximately 8:41 AM this morning a series of earthquakes rumbled through Contra Costa County. The first shock, which was described as a rolling sensation, caused buildings to sway, windows were broken....." "Approximately two minutes later, a more severe and intense shock hit the area, knocking people off their feet, exploding plate glass windows, walls cracked and some buildings, damaged in the initial shock, collapsed....."

This excerpt from the exercise scenario describes the situation presented to seven cities and four county departments in an hour and a half exercise conducted at 0900 Friday Sept. 25. As this was the first major exercise the county has had in some time, its purpose was one of training the participants and developing the coordination required to mitigate damages in such a large scale disaster.

The exercise was developed and run by a consulting group who used 'simulators' to play the roles of those operations not actively participating (such as hospitals). The RACES organization was heavily involved in the exercise and provided the primary communications between the County EOC and the cities and an additional communications channel between the EOC and the various county departments. We also provided communications for the simulators.

This exercise gave us the opportunity to use the new equipment recently purchased by the county including the packet system. We had four radios in use for voice channels plus the packet at the EOC on Arnold Drive, three channels at State Region II for the simulators, and multiple channels at most of the cities. Despite Murphy creating its share of problems (which should always be EXPECTED), I think we did a good job and learned quite a bit. The exercise only ran for 1.5 hours, so just about the time we were solving the problems and really getting organized, it was over! We got a chance to evaluate the message form, learn more about how other agencies operate, and in general raise our visibility. Some of our operators got to experience what its like to be literally buried in traffic!

I would like to thank everyone who either helped out that morning or helped out in the many hours of preparation that went into this effort. It is an excellent beginning, people I have talked to both in the ham group and on the county staff agree that we have all benefitted from the experience. They are all also ready to do it again soon!

The following list of callsigns represents those who checked in or who I remember. If I have missed anyone, I apologize for the omission, but rest assured your help was appreciated. With over 40 people involved, I am bound to miss someone. There is no order to this list!

N6MWB, WB6JDO, KB6UY, N6QHF, N6NFR
WB6EZI, WA6HAM, N6LZM, WA6ZFZ, KA6SQN
WA6NQR, KD6BA, WA6AEO, WW6H, KA6FUB
WB6MZQ, WA6DQN, K6MFY, N6PAC, K6MFV
WU6P, N6LGB, N6PAW, N6JRK, N6EEQ, KB6JEC
KA6SOC, N6ASB, NI6A, KA6OLK, WB6DDO
KB6IDJ, KA6DXY, WB6YRD, WA6YEU, KI6TB
KT6I, AA6DL, N6ZA, WA6OCZ, KB6LGB
W6LKE, KA6IVF, W6CPO

Again, many thanks to all and hope to see all of you plus more at the next one!

THREE NEW DIGITAL PACKET REPEATERS

By Louis Brydon, WA6OCZ
Contra Costa Repeater Association

Contra Costa County has an exciting new addition to its already outstanding amateur radio communications system. On Saturday September 5th (1987), three new digital (packet) repeaters were installed on hilltops around Contra Costa County. This event marked the conclusion of months of negotiation preparation and planning on the part of many local amateurs. These 'Digipeaters' are intended for use by the entire amateur community, with special emphasis on emergency communications and organized events by RACES/ARES and the Contra Costa County Sheriff's Reserve Communications Unit.

The digital network operates on 144.910 Mhz. WA6OCZ-1 (alias=KREG) is located on Kregor Peak between Concord and Pittsburg at 1900 feet ASL. This machine covers East and central county, Solano county, as well as providing out of area linking to Sacramento and the Sacramento/San Joaquin valleys.

WA6OCZ-2 (alias=BALD) is located on Bald Peak between Orinda and Berkeley at 2100 feet ASL. This machine covers West and central county, North county, the Moraga hole, as well as providing out of area linking to the rest of the Bay Area.

WA6OCZ-3 (alias=HIGH) is located on Highlands Ridge between San Ramon and Byron at 2300 feet ASL. This machine covers East and South/central county, as well as Morgan Territory, Black Hawk, Danville and the Livermore Valley.

The three digipeaters were built (and are maintained) by the Contra Costa Repeater Association (CCRA) using equipment provided by the County. The CCRA operates a network of amateur repeaters from these three locations in Contra Costa County. The network consists of a voice repeater on 147.735 MHz, the three digital repeaters on 144.910 Mhz, and three UHF voice repeaters. All three sites are

powered by 120 VAC. On each site a bank of 12V DC batteries provides uninterrupted DC backup, and an automatic engine driven generator provides redundant emergency power. All three sites have been hardened to survive an 8.0 (Richter) earthquake. All repeater and link RF is new or used commercial grade equipment. The CCRA is supported by approximately 80 active dues paying members, as well as donations from local businesses. The CCRA meets for breakfast in central county on the first Saturday of each month.

Special thanks should be expressed to the following people: Larry Kaye, W6CPD, who coordinated efforts between the Contra Costa Repeater Association, Contra Costa RACES/ARES, and the Contra Costa County administration. Brad Watson, WA6AEO, who coordinated the CCRA effort and handled the inevitable glitches that always occur. Dennis Matzen, KA6FUB, who assembled the hardware, and is responsible for its working the first time. Steve Overacker, WA6HAM; Gene Capener, WW6H; Doug Ferriera, N6PRT - who all worked very hard to get the system operational in time for the September SET. Also, many thanks to Phil Batchelor, Bob Teal (WB6JRX) and Bob Guaspari from the Contra Costa County administration.

For further information on the digipeater system or the CCRA, contact Brad Watson (WA6AEO) at 676-8239, or myself, Louis Brydon, at 837-1339.

SAGE ADVICE FROM SAVANT WA6DQN

WHEN IN TROUBLE, WHEN IN DOUBT,
RUN IN CIRCLES, SCREAM & SHOUT!

THE OTHER DAY WHILE AT MY SHACK, I CALLED CQ, BUT NO ONE CAME BACK. I LOOKED AROUND, THE SWITCH WAS ON, I DID NOT KNOW WHAT COULD BE WRONG. I SWITCHED THE RIG TO ANOTHER BAND BUT NO ONE SEEMED TO BE AT HAND. AND THEN I CHECKED INTO A NET BUT NO RESPONSES COULD I GET. I TRIED THE CODE AND IT WAS THE PITS, THERE WERE NO DAHS, THERE WERE NO DITS. AND TO MY SHAME AND MY CHAGRIN, THE AC PLUG WAS NOT PLUGGED IN.

LAS TRAMPAS RIDGE TRAIL RIDE

By Jim House - KA6IVF

THE FOLLOWING OPERATORS ASSISTED
WITH COMMUNICATIONS AT THE LAS
TRAMPAS TRAIL RIDE ON SEPT. 13, 1987

* * * * *
KA6DXY JIM KI6TB JESS
KB6UX BETTY LOU KB6QDT GEORGE
KB6MXR JOHN KA6IVF JIM
 KB6FHC MIKE

* * * * *
SOME OF US WERE ASKED TO REPORT
AT 0600 OR EARLIER, AND FINDING
ONE'S WAY AROUND CHABOT/REDWOOD
PARK IN THE DARK IS AN INTERESTING
EXPERIENCE. EVERYONE FOUND THEIR
PLACES EVENTUALLY AND WE
ESTABLISHED COMMUNICATIONS VIA THE
706 MACHINE. FROM BASE CAMP, IT
WAS A TYPICAL ACTIVITY, HOURS OF
BOREDOM, PUNCTUATED BY MINUTES OF
SHEER PANIC. WE DID HAVE AN
INJURED RIDER, A LADY WHO HURT HER
KNEE AGAINST A TREE AND WAS KNOCKED
OFF HER HORSE. WHEN HER COMPANION
RIDER CAME INTO BASE CAMP, THE WORD
WE GOT WAS THAT THE VICTIM WOULD
HAVE TO BE CARRIED OUT ON A
STRETCHER, HOWEVER WHEN SEVERAL OF
THE RIDERS RETURNED TO HELP HER,
WHILE WAITING FOR AN AMBULANCE,
THEY WERE ABLE TO GET HER ON A
HORSE, WHICH CARRIED HER TO A POINT
ON THE TRAIL WHERE A JEEP COULD
BRING HER THE REST OF THE WAY TO
MEET THE AMBULANCE. THE RIDE ENDED
SUCCESSFULLY ABOUT MID AFTERNOON,
AND WE WERE THANKED BY THE SPONSORS
FOR OUR ASSISTANCE. MY THANKS ALSO
TO THOSE WHO HELPED OUT.

-73- JIM KA6IVF

=====

WORLD BANK HEADQUARTERS STATION

=====

THE WORLD BANK HEADQUARTERS IN
WASHINGTON, D.C., IS NOW THE HOME
OF A NEW CLUB AND AN AMATEUR RADIO
STATION.

THE FORMATIVE MEETING WAS HELD
WITH ABOUT 15 AMATEURS PRESENT.
THE HAM STATION USES A 6-ELEMENT
TELREX TRIBAND ANTENNA AT 40' ABOVE
THE ROOF OF THE WORLD BANK
BUILDING.

THE STATION IS CURRENTLY USING
THE CALL SIGN OF MEMBER KK4HD AND
IS WAITING A DECISION ON WHETHER
THEY WILL HAVE AN FCC-ISSUED CALL
SIGN OR IF THEY FALL UNDER UNITED
STATION JURISDICTION AND HAVE A 4U
PREFIX.

(WESTLINK)

RACES/ARES TRAINING AND EXERCISES

JIM HOUSE, KA6IVF, E.C., CENTRAL
CONTRA COSTA COUNTY, IS PLANNING
ANOTHER TRAINING SESSION FOR ALL
RACES MEMBERS AND ALL OTHER AMATEUR
RADIO OPERATORS WHO WOULD LIKE TO
JOIN RACES AND PARTICIPATE.

IF YOU HAVEN'T ATTENDED ONE OF
THESE SESSIONS YOU'RE INVITED TO
ATTEND AND AUDIT. DETAILS OF THE
TRAINING SESSION ARE NOT YET
AVAILABLE BUT WILL APPEAR IN THE
NEXT ISSUE OF 'THE CARRIER' AND
WILL BE ANNOUNCED AND UPDATED ON
BOTH THE RACES NET THURSDAY NIGHTS
AT 7PM (SEE FRONT PAGE FOR DETAILS)
AND THE CLUB NET (147.06) THURSDAYS
BETWEEN NOW AND THE SCHEDULED DATE.
EXPECT NEW AND USEFUL INFORMATION
AND PROBABLY SPEAKERS FROM THE
CALIFORNIA DEPARTMENT OF FORESTRY
AND THE CONCORD POLICE DEPARTMENT.

*DON'T MISS IT * SAVE THE DATE *

SATURDAY, OCTOBER 24, 1987

FIRE COLLEGE, TREAT BLVD.

(NEAR OAK GROVE ROAD)

CLASSROOM #1 0900 - 1600

ALCATRAZ ISLAND

THE SACRAMENTO ARC WILL OPERATE ITS
CLUB STATION W6AK FROM 1730Z TO
2300Z ON SATURDAY, OCTOBER 10 FROM
ALCATRAZ ISLAND. *CW* 3725, 7125,
14050, 21085 *PHONE* 3950, 7270,
14300, 21400, 146.52 *PACKET* 145.01
W6AK-5. SPECIAL QSL AVAILABLE FOR
ONE QSO. SEND QSL AND SASE TO:
SACRAMENTO ARC, P.O. BOX 161903,
SACRAMENTO, CA 95816-1903.

30th JOTA

JAMBOREE OF THE AIR, JOTA, IS AN
ANNUAL SCOUTING/AMATEUR RADIO
EVENT SPONSORED BY THE WORLD BUREAU
OF THE WORLD ORGANIZATION OF THE
SCOUT MOVEMENT. IT IS ALWAYS HELD
DURING THE THIRD FULL WEEKEND OF
OCTOBER.

THOUSANDS OF STATIONS AROUND THE
WORLD PARTICIPATE. ANYONE INTEREST-
ED IN DOING A GOOD TURN FOR SCOUT-
ING AND AMATEUR RADIO CAN JOIN IN.

FROM SATURDAY 0001 TO SUNDAY 2400
ON CW-3590, 7030, 14070, 21140, 28190,
VOICE-3940, 7290, 14290, 21360, 28990.

My principal travelling in the last
month has been through a salad bar.

TECH STUFF
By Wayne WB6WZV

Last month RS 232 had a once-over lightly, so this time we will attack Mr. ASCII. This is the standard that defines the format of the information being transferred over the RS 232 interface. To begin, each letter is represented by a series of bits. For example, the pattern 1000001 is the letter "A". The rate at which the bits of a character are sent is termed baud rate. If the channel is running at 300 baud it will be handling data at about 30 characters per second or 360 words per minute maximum, what a fist! There are a total of about 10 bits per character. The first bit is a space or a +3 voltage level if it is RS 232. 7 or 8 bits, which are the code for the character come next, followed by the parity bit, maybe. Finally there is either 1 or 2 stop bits. (That is clear as mud, but hang in there and all will get better.) The 7 or 8 bits for the character code should be 7 bits if you are being a purist but 8 bits are used often so we will let them in too. In either case, we only count the first 7 bits which gives us a total of 128 possible characters to use in ASCII transmission. These are defined by the standard and include code for controls like carriage return and line feed. Next comes the parity which may or may not be used. That is up to you and the TNC. Parity is a means of checking for correctness of the received characters. If it is used, parity is either Even or Odd and means that the total number of marks (1's) in a character are odd or even. the ASCII "A" has 2 marks in it so the parity bit for Odd parity would be present. 0100000110 is the pattern for an odd parity "A", and 0100000100 would be the pattern for Even parity "A". The last bit is the stop bit that identifies the end of the character. ASCII provides for either 1 or 2 stop bits to guaranteed spaces between characters. If the next character is not ready to be sent, the low level will last until it is ready, and hence you will have a bunch of "stop" bits.

Next time we will fill in a bit more of this puzzle.

EdNote: Second contribution by Wayne

* ARRL UPDATES *



AFTER 67 YEARS OF BROTHERHOOD WITH ARRL THE 'CANADIAN RADIO RELAY LEAGUE' WILL INDEPENDENTLY REPRESENT CANADIAN AMATEURS BEGINNING JANUARY 1988.

POSSIBLE ARRL ADMINISTRATION OF A PROGRAM TO ISSUE SPECIAL AMATEUR RADIO SERVICE CALL SIGNS IS BEFORE AN AD HOC COMMITTEE. SEVERAL SPECIFIC ISSUES WILL NEED TO BE ADDRESSED BY THE FCC PRIOR TO IMPLEMENTATION.

REALIZING THAT THE PRESENT FREQUENCY SPECTRUM ENJOYED BY AMATEURS IS BY NO MEANS GUARANTEED, AND THAT INTERNATIONAL BODIES MAY ATTEMPT TO REALLOCATE THE AMATEUR RADIO SERVICE SPECTRUM TO OTHER SERVICES IN THE NEXT DECADE, THE BOARD OF DIRECTORS HAS INSTRUCTED OFFICERS OF THE LEAGUE TO DRAFT A LONG-RANGE PLAN FOR BOARD CONSIDERATION WITH PERIODIC UPDATE AND REVIEW.

A PROGRAM HAS BEEN ESTABLISHED TO SOLICIT DONATIONS FOR A STATION TO PROVIDE CODE-PRACTICE AND BULLETIN SERVICES SIMILAR TO WIAW TO AMATEURS WEST OF THE ROCKY MOUNTAINS. SITE NOT YET CHOSEN.

THE LEGAL STRATEGY COMMITTEE HAS BEEN ASKED TO STUDY AND DETERMINE COST-EFFECTIVE WAYS TO DELIVER INFORMATION ABOUT AMATEUR ANTENNAS TO LOCAL PLANNING BOARDS AND COUNCILS.

HQ STAFF HAS BEEN DIRECTED TO REVIEW AND RECOMMEND NECESSARY CHANGES OR ADDITIONS TO THE PRESENT EMERGENCY- AND DISASTER-COMMUNICATIONS TRAINING OFFERINGS OF THE LEAGUE AS WELL AS REVIEW AND RECOMMEND CHANGES IN THE RECOGNITION OF SUCH EFFORTS BY AMATEURS.

You can buy flattery, but envy must be earned.

"TUNE IN THE WORLD" UPDATED

A NEW VERSION OF 'TUNE IN THE WORLD', THE 7th EDITION, INCLUDES ALL MATERIAL COVERED UNDER THE NEW RULES REGARDING NOVICE ENHANCEMENT AND INCLUDES TWO AUDIO CASSETTES FOR LEARNING MORSE CODE. (ARRL NEWS)

PROPAGATION BEACONS - 20 METERS

NINE PROPAGATION BEACONS OPERATING CRYSTAL-CONTROLLED ON 14.100 MHz TRANSMITS FOR ONE MINUTE OF A TEN MINUTE INTERVAL DAILY. EACH BEACON SENDS 4 SERIES OF 9-SECOND DASHES; AT 100W, 10W, 1W, 0.1W

AN OPERATOR MONITORING THE BEACON FREQUENCY CAN DETERMINE 20-METER BAND CONDITIONS AROUND THE WORLD IN A SHORT TIME AND ALSO TEST THE EFFECTIVENESS OF DIFFERENT ANTENNAS BY SWITCHING DURING THE 9-SECOND DASHES.

TIME	STATION	LOCATION
00	4U1UN/B	NEW YORK
01	W6WX/B	CALIFORNIA
02	KH60/B	HONOLULU
03	JA2IGY/B	JAPAN
04	4X6TU/B	ISRAEL
05	OH2B	FINLAND
06	CT3B	MADIERA ISLAND
07	ZS6DN/B	SOUTH AFRICA
08	LU4AA	BUENOS AIRES

UNINTERRUPTIBLE POWER SUPPLY FOR COMPUTERS

POWER LINE INTERRUPTION WHILE YOU ARE USING YOUR COMPUTER CAN BE DISASTROUS AS EVERYONE KNOWS. THE CONTENTS OF THE MEMORY MAY BE LOST. IF WRITING TO THE DIRECTORY, IT MAY BE UNREADABLE. THE ENTIRE CONTENTS OF THE DISK MAY BE LOST.

A DEVICE IS NOW AVAILABLE THAT PLUGS INTO A WALL OUTLET AND POWERS THE COMPUTER. IT CONTAINS A BATTERY WITH A LEAD-ACID GEL CELL AND SOME ELECTRONIC CIRCUITRY THAT SENSES THE POWER LINE. IF AN INTERRUPTION OCCURS, THE 'UPS' INSTANTLY SWITCHES TO A CIRCUIT THAT CONVERTS THE BATTERY DC TO 110 VOLTS AC AND CONTINUES TO POWER THE COMPUTER. THEY ARE PRESENTLY RATED AT 200W AND UP.

A SUGGESTION TO IMPROVE CODE TESTS

(EdNote) The following are excerpts from a letter addressed to the FCC.

I AM PLEASED THAT YOU HAVE SEPARATED TECHNICIAN AND GENERAL WRITTEN EXAMINATION MATERIAL. I HOPE YOU WILL CONTINUE THIS TREND AND SEPARATE CODE TESTS. AT PRESENT, NOVICE AND TECHNICIAN APPLICANTS MUST PASS ELEMENT 1-A, WHICH IS 5 WPM, GENERAL AND ADVANCED APPLICANTS MUST PASS ELEMENT 1-B, WHICH IS 13 WPM. THE EXTRA CLASS REQUIREMENT IS ELEMENT 1-C AT 20 WPM.

I BELIEVE A SEPARATE CODE TEST REQUIREMENT IS APPROPRIATE FOR EACH CLASS OF LICENSE: 4 (NOVICE), 8 (TECHNICIAN), 12 (GENERAL), 16 (ADVANCED), AND 20 (EXTRA CLASS).

THE JUMP FROM 5 TO 13 WPM IS DRASTIC. ALLOWING CANDIDATES TO MOVE UP IN INCREMENTS OF 4 WPM SHOULD BE BENEFICIAL. THE PROPOSED 8 AND 12 WPM TECHNICIAN AND GENERAL CODE TEST REQUIREMENTS SHOULD HELP INCREASE UPGRADES.

SIMILARLY, THE DIFFERENCE BETWEEN 13 AND 20 WPM IS PRONOUNCED. THE PROPOSED 16 WPM ADVANCED CODE TEST REQUIREMENT WOULD BE MORE CONDUCTIVE TO UPGRADING TO THE 20 WPM EXTRA CLASS REQUIREMENT.

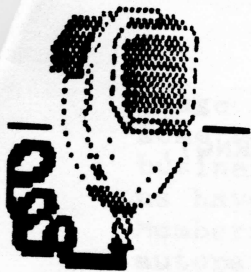
EACH STEP UP IN LICENSE GRADE ENTAILS INCREASED OPERATING SPECTRUM WHEREIN CODE MAY BE USED. IT SEEMS REASONABLE THAT THE ASSOCIATED CODE TEST SPEED REQUIREMENTS SHOULD BE SEPARATE AND EVENLY STEPPED FROM THE LOWEST TO THE HIGHEST LICENSE.

(Suggested by William G. Welsh, W6DDB, Burbank, CA).

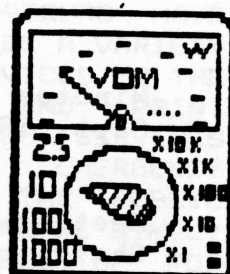
VSWR AFFECTS POWER RATING

THE VSWR ON A COAXIAL CABLE WILL AFFECT THE AMOUNT OF POWER THAT THE COAX CAN TOLERATE.

CABLE MANUFACTURER'S POWER RATINGS ASSUME A PERFECT VSWR. HOWEVER, A CABLE RATED AT 500 WATTS CAN SAFELY HANDLE ONLY 250 WATTS WITH A 2 TO 1 VSWR. THE SAFE RATING WOULD DROP TO 133 WATTS WITH A 3.75 TO 1 VSWR. THE DERATING RESULTS FROM HEAT AND CAN BE CALCULATED BY DIVIDING THE VSWR VALUE INTO THE POWER RATING. (WORLD RADIO)



MDARC AUCTION FRIDAY OCT 16



SEMI-ANNUAL AMATEUR RADIO AUCTION
2100 TICE VALLEY BLVD
WALNUT CREEK
(GRACE PRESBYTERIAN CHURCH)

DOORS OPEN AT 6:00 PM, AUCTION STARTS AT 7:00 PM

FREE ADMISSION

WE INVITE ALL RADIO ENTHUSIASTS TO THE MT. DIABLO AMATEUR RADIO CLUB'S AUCTION. WE HAVE UPGRADED THE AUCTION FOR YOUR ENJOYMENT. OUR TWO AUCTIONS WERE QUITE AN IMPROVEMENT OVER PRIOR YEARS SO THEREFORE WE WILL ONCE AGAIN LIMIT ITEMS FOR THE AUCTION TO:

AMATEUR RADIO EQUIPMENT AND ALL PERTINENT ACCESSORIES
RECEIVING AND/OR TRANSMITTING DEVICES
INTERESTING ELECTRONIC GADGETS
TEST EQUIPMENT
COMPUTERS AND ACCESSORIES

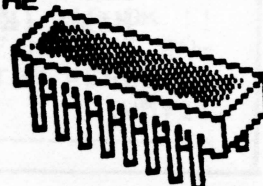
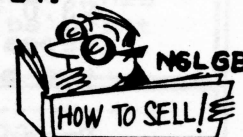
WE INVITE YOU TO BRING YOUR UN-NEEDED BUT WORKING, OR SERVICEABLE GEAR FOR SALE BY THE CLUB.

WE DO NOT WANT NOR WILL ACCEPT:

BOAT ANCHORS
TRANSFORMERS
OIL CAPACITORS
RUSTED OR OLD CHASSIS' OR
ANYTHING THAT NEEDS A HAND-TRUCK, WHEELBARROW OR CRANE
OR ANYTHING ELSE THAT YOU ARE TOO LAZY TO HAUL TO THE DUMP.
(REMEMBER IF YOU THINK ITS JUNK, IT PROBABLY IS, LEAVE IT HOME)

THE AUCTION CHAIRMAN IS SCOTT THOMAS, N6LGB. HE HAS THE FINAL SAY. IF YOU HAVE ANY DOUBTS OR QUESTIONS CALL HIM AT: 685-3784.

SIMPLIFIED DIRECTIONS TO THE AUCTION: TAKE HWY 24 TO THE PLEASANT HILL ROAD EXIT ON THE LAFAYETTE/WALNUT CREEK BORDER AND FOLLOW THE SIGNS TO ROSSMOOR. THE AUCTION IS IN THE CHURCH ON THE LEFT SIDE OF TICE VALLEY BLVD ABOUT 500 FEET PAST THE ENTRANCE TO THE ROSSMOOR RETIREMENT VILLAGE.



Minutes of RRRG meeting
Sept. 16, 1987

Meeting called to order by Chairman Bob Dahl (KA6LSL) at 8:06 pm. Membership lists were passed out to members as they entered. Those members not attending will receive their membership list by mail.

Treasurer's report indicated that we have approximately \$1930.

The Statement of Policy for the RRRG will be printed and inserted into an upcoming CARRIER.

The Technical Committee reported that N6ZA, N6GOZ, and KA6LSL installed the new antennas on the tower. Initial reports indicate that the new antennas are performing better than our most optimistic expectations. The 450 repeater will be placed into PL shortly in order to minimize interference. PL will be 100 Hz and the PL frequency will be freely disseminated. Jay Caldis then read a statement from Technical Chairman Paul Parker who was not in attendance. Paul's letter explained alternate technical solutions to installing a controller on the 450 repeater. His recommendation was to purchase a new RC-85 V3.0 controller for the 450 repeater and to upgrade the two meter controller to V 3.0.

Prospective members were introduced, sponsored, and inducted into membership. New RRRG members are Greg (N6PUO), Mike (KB6RMT), Bert (KB7BGM),

Al (N6PZG), Vic (WA6OMW), Gordon (N6QEH), Ojay (KB6RNQ), Lea (KB6RSL), and Allan (KB6MCS).

NEW BUSINESS

Bob and Rick (WB6EZI) commented and answered questions regarding the new controller. They added their support for the purchase of the controller. Bob explained the financial details and the effect on the treasury. The new controller and the upgrade of the two meter controller will cost \$1086.30.

Group members were reminded that 1987 dues are due and payable in January.

Code changes for the repeaters will be implemented on the weekend of February 13/14, 1988. All persons who have not paid their 1988 dues as of that date will not receive the new codes.

A motion was made by Rick (WB6EZI) and seconded by Carolyn Dahl (KA6LSK) to purchase a new RC-85 V3.0 controller for the 450 repeater and to upgrade the two meter repeater controller to V 3.0. The motion was unanimously passed by the membership.

Bob explained the handouts which members received at the start of the meeting. They listed the RRRG membership by call and last name. Autodial slot information was included for all members except for one who requested that his not be published.

Comments were made by Bob and Don (W6NKF) regarding proper

usage of the repeaters and some borderline, almost business calls which some of us have been hearing lately. Members were reminded that all autopatch telephone calls are very expensive and to please eliminate all unnecessary calls.

Bob also commented on some interference to the repeaters which has been occurring lately. Members are reminded not to make comments on or in any way encourage malicious interference to the machines. Malicious autopatch calls are to be "dumped" by ANY member hearing one. Control operators are taking steps to minimize interference.

Jim House (KA6IVF) requested assistance for an upcoming county-wide SET on Friday, September 25, 1987.

Dick Brown (KT6X) requested assistance for a Walnut Festival 10K run. Jim House and Jay Caldis volunteered.

Having no further business at hand, Bob adjourned the meeting at 9:22 pm.

Respectfully submitted,

Rick Barber (WB6EZI)
Acting Secretary

AMATEUR RADIO MEDIA COMMITTEE ASKS FOR INPUT

WHENEVER THERE'S DISRUPTION OR OVERLOAD OF CONVENTIONAL COMMUNICATIONS CIRCUITS, OR SOMETHING IMPORTANT HAPPENS WHERE SUCH CIRCUITS DO NOT EXIST, RADIO AMATEURS MAY BE CALLED TO BRIDGE THE COMMUNICATIONS GAP. ANY ONE OF US MAY FIND OURSELVES, WITHOUT WARNING, IN SUCH A POSITION.

RECENTLY THERE HAVE BEEN A NUMBER OF SUCH CASES WHERE, IN

ADDITION TO SUPPLYING COMMUNICATIONS FOR GOVERNMENT AND RELIEF AGENCIES, AMATEURS HAVE BEEN ASKED TO PROVIDE A VARIETY OF COMMUNICATIONS SERVICES TO THE RADIO, TELEVISION AND PRINT MEDIA. WHEN DO SUCH SERVICES CONSTITUTE EMERGENCY COMMUNICATIONS IN THE PUBLIC INTEREST, AND WHEN ARE WE SIMPLY BEING TAKEN ADVANTAGE OF FOR COMPETITIVE GAIN? THE LINE IS NOT EASY TO DRAW, PARTICULARLY UNDER PRESSURE.

TO HELP, ARRL HAS ESTABLISHED AN Ad Hoc Committee ON 'AMATEUR RADIO AND THE MEDIA' CONSISTING OF FOUR LEAGUE MEMBERS WITH EXTENSIVE EXPERIENCE ON BOTH SIDE OF THE QUESTION. OVER THE NEXT SEVERAL MONTHS, THE COMMITTEE MEMBERS WILL BE DRAFTING A SUGGESTED SET OF ETHICAL GUIDELINES FOR USE DURING AMATEUR RADIO/MEDIA CONTACT. THE GUIDELINES, IT IS HOPED, WILL HELP TO EDUCATE MEDIA REPRESENTATIVES AS TO WHAT RADIO AMATEURS CAN AND CANNOT DO FOR THEM, AND TO EASE SOME OF THE PRESSURE ON THE INDIVIDUAL AMTEURS IN THE FIELD.

IF YOU HAVE HAD AN EXPERIENCE THAT WOULD HELP THE COMMITTEE, YOUR INPUT IS BEING SOUGHT !! IN PARTICULAR: (1) HOW HAVE YOU ASSISTED THE NEWS MEDIA IN THE PAST ? (2) TO WHAT EXTENT SHOULD MEDIA REPRESENTATIVES BE ALLOWED TO INVOLVE RADIO AMATEURS IN NEWS COVERAGE? (3) IS NEWS/AMATEUR RADIO INTERACTION SOMETHING THAT SHOULD BE ENCOURAGED OR DISCOURAGED?

SEND YOUR COMMENTS TO MICHAEL R. RILEY, KX1B, ARRL STAFF LIAISON, COMMITTEE ON AMATEUR RADIO AND THE MEDIA, 225 MAIN ST. NEWINGTON, CT 06111. (QST 9-87)

(EdNote: When/if the guidelines are available, we will be print them.)

NOVICE CROSSBANDING ??

NOVICE CROSSBANDING VIA REPEATERS LINKING THE 220 MHz BAND TO OTHER BANDS, SUCH AS 2-METERS, IS OK !! IT WAS NOT AN ISSUE OF NOVICE ENHANCEMENT ACCORDING TO THE PERSONAL RADIO BRANCH, FCC. (WSYI)

MINUTES OF MDARC MONTHLY MEETING
18 SEPTEMBER 1987

THE MEETING WAS CALLED TO ORDER
BY VICE PRESIDENT DICK BROWN.

WE HAD ONE GUEST FROM THE NEW
NOVICE CLASS, AND NO UP-GRADES.

COMMITTEE REPORTS:

TREAS. DICK SCHULZE GAVE THE
TREASURER REPORT, WE HAVE \$2664.63
JOE GREGORY TOLD OF PAST AND
FUTURE EVENTS. LOOK FURTHER IN THE
CARRIER FOR FUTURE EVENTS.

JANE (SEC.) TOLD OF THE ON-GOING
HAM CLASSES. TUE. EVENINGS 7-9 P.M.,
COLLEGE PARK HIGH SCHOOL, CONCORD.

GEORGE ROUSCH REPORTED THE XMAS
PARTY IS 20 DEC. 1987. GEORGE HAD
CHARGE OF THE PRIZES THIS MONTH,
GRAND PRIZE WAS A SURGE PROTECTOR.
DR. GEORGE JONES DONATED A BOOK
TOWARD THE PRIZES.

MEMBERSHIP: DR. GEORGE JONES MADE A
HISTORY OF THE CLUB, LOOK ELSEWHERE
IN THE CARRIER FOR SAME. WE HAVE
237 MEMBERS.

VICE PRES. DICK BROWN REMINDED US
OF THE CLUB AUCTION 16 OCTOBER COME
EARLY.

JAY KT6Y INFORMED US THE ROCKY
RIDGE REPEATER HAS NEW ANTENNAS,
220 CAN TALK TO OAKLAND.

JANE N6NVA TOLD HOW THE AWARDS
COMMITTEE WAS DOING. ANOTHER
MEETING IN OCTOBER.

BOARD MEETING 23 SEPT., 8:00 P.M.
DICK SCHULZE HOME.

WE HAVE A NOMINATING COMMITTEE,
SCOTT MILES, JAY CALDIS, AND PAUL
JONES.

BRAD WATSON WA6AEO OF CCRA SPOKE
ON THE PACKET RADIO SYSTEM THAT THE
CCRA INSTALLED RECENTLY FOR RACES-
ARES USE, THE DIGIPEATERS ARE
LOCATED ON KREGOR, BALD, AND HIGH-
LANDS, THE CALL SIGN IS WA6OCZ-1,
-2, AND -3.

OUR SPEAKER CARL COOK AI6V SHOWED
SLIDES OF HIS TRIP TO CLIPPERTON
ISLAND, AND QUESTIONS WERE
ANSWERED. THIS WAS ONE PRESENTATION
THAT WAS TOPS.

RESPECTFULLY SUBMITTED,
JANE WALKER, N6NVA
SECRETARY

FOR SALE (ESTATE)

TWO NEW EIMAC TUBES (MATCHED PAIR)
#3-500Z - IN ORIGINAL CARTONS
NEVER USED - \$100 EACH OR BEST OFFER
CALL BILL (415) 276-0570

MDARC BOARD MEETING MINUTES
23 SEPTEMBER 1987

ATTENDEES:

PRESIDENT	SCOTT MILES	WB6PQM
VICE PRES.	DICK BROWN	KT6X
SECRETARY	JANE WALKER	N6NVA
TREASURER	DICK SCHULZE	AA6DL

BOARD MEMBERS:

JAY CALDIS	KT6X
JIM HOUSE	KA6IVF

MEMBERS PRESENT:

CARRIER ED: STAN CHRISTIAN	WU6P
E.C. JIM PERRY	AA6CK

* * * * *

PRESIDENT SCOTT MILES CALLED THE
MEETING TO ORDER. THE BOARD
APPROVED THE MINUTES OF THE
PREVIOUS MEETING.

THE AUCTION IS 16 OCT. 1987. DICK
BROWN PLANS AN ARRL FILM FOR THE
NOVEMBER MEETING.

DICK SCHULZE GAVE A TREASURER
REPORT OF \$2507.52

THE CLUB HAS 237 MEMBERS.

STAN WU6P GAVE A CARRIER REPORT.

CLUB INSURANCE IS \$285, THE BOARD
APPROVED PAYING FOR SAME.

NEXT BOARD MEETING, 28 OCT. 1987
8:00 P.M. AT THE HOME OF SECRETARY
JANE WALKER.

RESPECTFULLY SUBMITTED,
JANE WALKER, N6NVA
SECRETARY

TRYING TO FIND OR JOIN A NET ?

THE NEW "1987 ARRL NET DIRECTORY"
IS NOW AVAILABLE FOR ONLY \$1 (ONE
DOLLAR) POSTPAID. IT GIVES A
CURRENT LISTING OF ALL NATIONAL
TRAFFIC SYSTEMS NETS AND MANY
LOCAL, REGIONAL AND INTERNATIONAL
NET OPERATIONS. ORDER FROM:
ARRL NET DIRECTORY
225 MAIN STREET
NEWINGTON, CT 06111

MOVING TO/OR KNOW SOMEONE IN L.A. ?

THE STATE OFFICE OF EMERGENCY
SERVICES IS RECRUITING AMATEUR
RADIO OPERATORS FOR SEVERAL KEY
POSITIONS IN SOUTHERN CALIFORNIA.
THEY'RE URGENTLY NEEDED AT TWO
LOCATIONS, LOS ALAMITOS AND
ONTARIO. MINIMUM REQUIREMENTS: A
LICENSE HIGHER THAN NOVICE AND A
CALIFORNIA DRIVER'S LICENSE.

AMATEUR RADIO SLIDES NEEDED

STAN HARTEK, KH6GBX, OF THE CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES (OES), IS PUTTING TOGETHER AN AUDIO/VISUAL SLIDE PROGRAM ON AMATEUR RADIO FOR THE GOVERNOR'S OES TO SHOW TO EMERGENCY MANAGEMENT AGENCY STAFFS AND VOLUNTEERS IN CALIFORNIA, AS WELL AS FUTURE HAMS - AT CONFERENCES, SEMINARS AND THE LIKE IN CALIFORNIA.

35mm SLIDES ARE NEEDED. SLIDES NOT USED WILL BE RETURNED. STAN FEELS THAT THE PROGRAM WILL BE FAR BETTER WITH PICTURES FROM MANY SOURCES RATHER THAN A FEW REPRESENTATIVE PICTURES. THE LOCALE OF THE PICTURES IS NOT IMPORTANT - THEY CAN BE TAKEN ANYWHERE IN THE U.S. AND SHOULD SHOW AMATEUR RADIO EQUIPMENT IN EMERGENCY OPERATION CENTERS, ACTUAL EMERGENCIES, FIRE CAMPS, COMMUNICATIONS DRILLS, FIELD-DAY SETTINGS, RESEARCH AND DEVELOPMENT PROJECTS, MOBILES, VANS, USING PORTABLES, INTERIOR/ EXTERIOR SHOTS, ATV, PACKET, RTTY, ANTENNAS ON EOC'S. ANYTHING THAT SHOWS AMATEUR RADIO IN A POSITIVE LIGHT FOR ARES/RACES UTILIZATION. - SLIDES SHOULD BE SENT TO:

STANLEY E. HARTEK, KH6GBX
AMATEUR RADIO SERVICES
COORDINATOR, GOVERNOR'S OES
2800 MEADOWVIEW ROAD
SACRAMENTO, CA 95832

RESTRUCTURE PART 97

RESTRUCTURING THE PHYSICAL LAYOUT AND ORGANIZATION, AND A COMPLETE REVISION OF THE AMATEUR RADIO SERVICE RULES (PART 97), BEGINS AFTER LABOR DAY ACCORDING TO FCC'S SPECIAL SERVICES DIVISION CHIEF. 'IT WILL NOT BE A PLAIN LANGUAGE REWRITE'. (WSYI 8/7/87)

PORTABLE 'J' POLE ANTENNA

IF YOU WOULD LIKE TO SEE A WELL-MADE PORTABLE 2M 'J' POLE ANTENNA THAT CAN BE STORED IN A VERY SMALL SPACE FOR PORTABILITY AND HUNG FOR QUICK USE, ASK TO SEE THE ONE MADE BY SCOTT THOMAS, N6LGB.

SPECIAL ENROLLMENT PERIOD FOR ARRL "ALL RISK" HAM RADIO INSURANCE.

A SPECIAL ENROLLMENT PERIOD IS CURRENTLY IN PROGRESS UNTIL NOVEMBER 1 FOR THE ARRL "All Risk" HAM RADIO INSURANCE PROGRAM. ALL MEMBERS MAY ENROLL WITH GUARANTEED ACCEPTANCE.

INSURED EQUIPMENT AND ACCESSORIES ARE COVERED FOR LOSS DUE TO THEFT, DAMAGE CAUSED BY FIRE, LIGHTNING, COLLISION, SHORT CIRCUITING DUE TO FIRE FLOOD, TORNADO OR OTHER NATURAL CALAMITY.

COVERAGE INCLUDES EQUIPMENT AT HOME, IN YOUR CAR AND AT A FIELD DAY OR HAMFEST SITE. FURTHERMORE, IF NEW EQUIPMENT IS PURCHASED DURING THE POLICY YEAR VALUED UP TO \$1000, THAT EQUIPMENT IS FULLY COVERED AT NO ADDITIONAL COST UNTIL THE NEXT RENEWAL OF THE POLICY.

THE MOST OUTSTANDING FEATURE OF THE PROGRAM IS ITS COST. THIS FULLY COMPREHENSIVE INSURANCE PROGRAM CAN BE PURCHASED FOR AN ENTIRE YEAR FOR ONLY \$1.25 PER \$100 OF REPLACEMENT COST VALUE, PLUS A \$5 YEARLY ADMINISTRATIVE FEE. A \$20 MINIMUM PREMIUM IS REQUIRED. (QST 9/87)

(EdNote: An application form for this insurance is on the last page)

PORTABLE RADIO HANDLING TIPS

SOMETIMES PORTABLE RADIOS HAVE TO BE PLACED ON THE FLOOR, THE SEAT OR THE DASHBOARDS OF CARS. THEN THEY GO SCOOTING OFF. ONE METHOD OF RETARDING THEIR UNWANTED MOVEMENT IS TO TAKE AN OLD BICYCLE INNER TUBE AND CUT OFF SOME 1"-WIDE CROSS-SECTIONS. SLIP IT AROUND YOUR RADIO OR ITS CARRYING CASE AND THE RUBBER WILL NOW GREATLY RETARD SLIPPING OR SLIDING.

YOU MAY WISH TO PUT SOME PAPER BETWEEN THIS OVERSIZED RUBBER BAND AND YOUR RADIO TO PREVENT DISCOLORATION OR THE RUBBER MIGRATING INTO THE PLASTIC.

NEVER LEAVE A PORTABLE ON THE DASH OR LYING IN THE DIRECT SUMMER SUN. EVEN PROFESSIONAL PORTABLES CAN DRIFT OFF FREQUENCY WHEN SUBJECTED TO SUCH HEAT. (WORLD RADIO)

MDARC MEMBERSHIP DIRECTORY UPDATE

The following are further changes in the Membership Directory published at the end of March, 1987; and supplements changes already published in the July, August and September Carriers.

Mount Diablo Amateur Radio Club welcomes the following new members:

CARPENTER, Victor; WA6OMW, Extra 1742 Shirley Dr., Pleasang Hill, CA 94523	(415)-685-3279
DAWSON, Bert; KB7BGM, Novice 440 Arroyo Dr., Martinez, CA 94553	(415)-372-6536
DJEDA, Lea A.; KB6RSL, Novice P.O. Box 547, Isleton, CA 95641	(916)-777-5012
DJEDA, P. L.; KB6RNQ, Novice P.O. Box 547, Isleton, CA 95641	(916)-777-5012
SPARACINO, Gregory H.; N6PUO, Technician 805 Arlington Way, Martinez, CA 94553	(415)-228-9440

Please note the following name, address and phone number changes:

MOSHER, Jess M. B.: (415)-837-6176
SCHIAPPACASSE, John K.: 1792 Meadow Pine Ct., Concord, CA 94521;
(415)-682-6599
VON UBIN, Unoalvd: previously listed as UBIN, Uno; (415)-682-2231

MDARC congratulates the following on their upgrades and/or new calls:

CUMBERPATCH, John A.: AA6DS, Extra
JONES, George P.: KI6YK
MAC DONAGH, Daniel J.: AA6DO
MC GLATHERY, Shirley: N6QHF, General
THEWS, Albert W.: N6PZG

Also note the following addition to the MDARC 1987 Officers:

Nominating Committee Chairman: Scott MILES, WB6PQM

Be sure to let the Membership Chairman know if you have any changes in your status: George Jones, KI6YK, 325 Glen Arms Dr., Danville, CA 94526, or the Club P.O. Box.

INTERIM PACKET FREQUENCIES

THE ARRL BOARD ADOPTED THE FOLLOWING FREQUENCIES AS SUGGESTED FREQUENCIES FOR PACKET RADIO OPERATION.

----- HF -----

160 METERS: 1802.3

80 METERS: 3594.3 FOR INTER-CONTINENTAL MESSAGE FORWARDING AND 3607.3 FOR NORTH AMERICAN MESSAGE FORWARDING.

40 METERS: 7038.3 FOR INTER-CONTINENTAL MESSAGE FORWARDING AND 7091.3 FOR NORTH AMERICAN MESSAGE FORWARDING.

30 METERS: 10145.3 FOR INTER-CONTINENTAL MESSAGE FORWARDING AND 10147.3 FOR NORTH AMERICAN MESSAGE FORWARDING.

20 METERS: 14102.3 FOR INTER-CONTINENTAL MESSAGE FORWARDING AND 14108.3 FOR INTRACONTINENTAL MESSAGE FORWARDING.

17 METERS: 18106.3 AND 18108.3
(PENDING FCC ALLOCATION)

15 METERS: 21096.3 AND 21098.3

12 METERS: 24926.3 AND 24928.3

10 METERS: 28102.3 AND 28104.3

----- VHF -----

6 METERS: 51.70 AS THE NATIONAL PACKET SIMPLEX FREQUENCY PLUS OTHER DUPLEX PAIRS FROM 51.62-51.78(OUT).

2 METERS: 145.01, 03, 05, 07, AND 09 WITH 145.01 SUGGESTED AS INTER-LAN USE.

1.25 METERS: 220.55, 65, 75, 85 AND 95 (100KHz BANDWIDTH FREQS) AND 221.01, 03, 05, 07, 09 (20KHz BAND WIDTH FREQS), AND 223.40 AS THE NATIONAL PACKET SIMPLEX FREQUENCY PLUS 223.42 TO 223.48 AS LOCAL OPTION USAGE. (ARRL NEWS)

A company manufacturing combustible products did not want its employees smoking. A sign posted said "Where there's smoke, there's FIRED".

IF YOU ARE IN THE EMERGENCY ROOM OF A HOSPITAL AND THE DOCTOR WRITES "S.O.B." ON YOUR RECORD, IT DOESN'T MEAN HE THINKS YOU ARE ONE, HE IS INDICATING YOU ARE 'SHORT OF BREATH'. !!

FCC GRANTS UNATTENDED PACKET SPECIAL TEMPORARY AUTHORITY REQUEST

THE FCC ANNOUNCED AT THE ARRL NATIONAL CONVENTION THAT THEY HAD GRANTED THE ARRL REQUEST TO PERMIT, FOR A SIX-MONTH PERIOD, APPROXIMATELY 50 AMATEUR PACKET STATIONS AROUND THE COUNTRY TO CONDUCT UNATTENDED AUTOMATIC OPERATION WHILE TRANSMITTING THIRD-PARTY TRAFFIC ON FREQUENCIES BELOW 50 MHz.

THE AMATEUR STATIONS INCLUDED UNDER THIS SPECIAL TEMPORARY AUTHORITY (STA) WILL BE ABLE TO PARTICIPATE AS RELAY STATIONS IN A LONG-HAUL HF NET CALLED "Skipnet". THIS NET WILL OPERATE ON A SINGLE FREQUENCY IN THE 80, 40, 30 AND 20-METER BANDS AND STATIONS WILL RELAY TRAFFIC VIA PACKET THROUGHOUT THE COUNTRY. IF THESE OPERATIONS ARE SUCCESSFUL, ARRL MAY DECIDE TO REQUEST A PERMANENT RULES CHANGE. (QST 9/87)

THE 24-HOUR CLOCK

INEXPENSIVE 24-HOUR CLOCKS, EITHER ANALOG OR DIGITAL, ARE READILY AVAILABLE. BUY ONE THAT IS EASY TO READ AT A GLANCE, PLACING THE CLOCK AT EYE LEVEL SINCE YOU WILL REFER TO IT FREQUENTLY. IF YOU DON'T INTEND TO WORK STATIONS OUT OF YOUR TIME ZONE, YOU CAN GET BY WITH A 12-HOUR CLOCK, BUT THE WORLD OF RADIO TELLS TIME, AND KEEPS ITS LOGS, IN 24-HOUR COORDINATED UNIVERSAL TIME (UTC). IF YOU DON'T PLAN TO WORK DX THERE ARE FIVE TIME ZONES IN THE CONTINENTAL U.S. AND CANADA, PLUS ONE EACH IN ALASKA AND HAWAII TO CONTEND WITH. WHEN YOU ASK OTHER OPERATORS TO CONFIRM A CONTACT WITH A QSL CARD, IT IS VERY HELPFUL IF EACH USES THE SAME 24-HOUR UTC SYSTEM. IT WILL PERMIT HIM AND YOU TO FIND THE CONTACT IN YOUR LOGS MORE READILY, AND WILL GREATLY IMPROVE YOUR CHANCES OF GETTING THE CONTACT CONFIRMED.

There are three ways to become a millionaire these days.
Inherit it. Earn it. Sue.

OFFICIAL APPLICATION

(Please type or print)

ARRL 301B



The ARRL "All Risk" Ham Radio Equipment Insurance Program

1. Name of Applicant: _____
2. Mailing Address: _____
City _____ State _____ Zip _____
3. Other Locations Where Equipment Is Kept _____

4. Date of Birth: _____
5. QST Control No. (from QST Label) _____

6. SCHEDULE OF EQUIPMENT

Use this listing to describe all radio equipment in your possession.

Description (Including Manufacturer's
Name, Model and Serial Numbers
or Other Identification)

Replacement Cost
(Value at today's prices)

_____	\$ _____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

7. To figure your premium complete the following:

- Total amount of Replacement Insurance \$ _____
- Total amount of Miscellaneous Items (valued under \$50.00 each) \$ _____
- Total amount of Insurance \$ _____
- Annual Premium (based on the rate of \$1.25 per \$100 of insurance.
Minimum premium \$20.00) \$ _____
- Add Annual Administration Charge \$ 5.00
- Total Amount Enclosed \$ _____

Date _____ Signature _____

Mail your completed application and premium check payable to:

Albert H. Wohlers & Co., Administrator
ARRL Insurance Plans
1500 Higgins Road
Park Ridge, Illinois 60068-5750
Tel. 1-800-323-2106



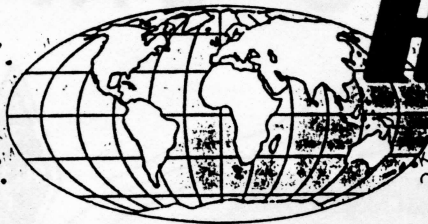
Your protection begins...on the first of the month following receipt of your application and premium check.

(Please photocopy this completed application for your records.)

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ENROLLMENT PERIOD ENDS: NOVEMBER 1, 1987

16



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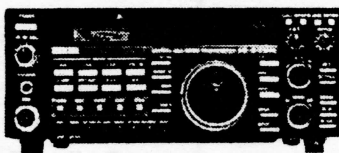
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ICOM IC-761



HF SUPERIOR GRADE
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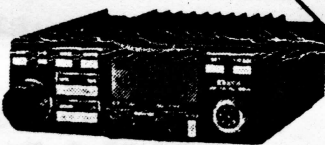
138 - 174 MHz
IC-275A (25w) IC-275H (100w)
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ICOM IC-1271A



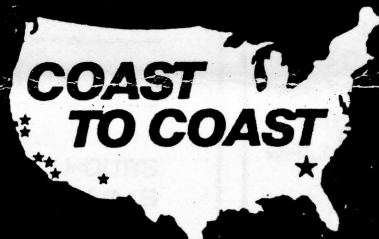
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ARE YOU READY FOR
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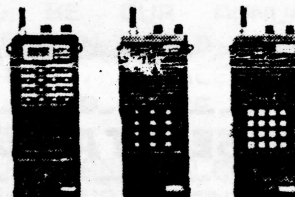
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25 MHz-1300 MHz
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(404) 263-0700
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(415) 342-5757
George, Mgr. WB6DSV
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OAKLAND, CA 94606
2210 Livingston St.
(415) 534-5757
Al, Mgr. WA6SYK
17N-5th Ave./17S-16th Ave.

PHOENIX, AZ 85015
1702 W. Camelback Rd.
(602) 242-3515
Bob, Mgr. K7RDH
East of Hwy. 17

SAN DIEGO, CA 92123
5375 Kearny Villa Rd.
(619) 560-4900
Tom, Mgr. KM6K
Hwy. 163 & Claremont Mesa Blvd.

VAN NUYS, CA 91411
6265 Sepulveda Blvd.
(818) 988-2212
Al, Mgr. K6YRA
San Diego Fwy.
at Victory Blvd.

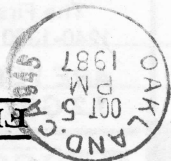
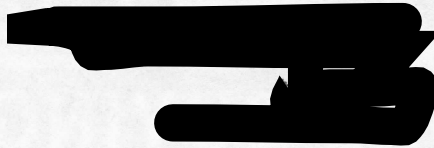
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